

# CITY OF SPOKANE Department of Wastewater Management Industrial Pretreatment Program



# BEST MANAGEMENT PRACTICES (BMPS) FOR HOSPITAL LAUNDRIES

The City of Spokane Riverside Park Water Reclamation Facility (RPWRF) collects and treats sewage from domestic and industrial sources. Certain industries have the potential to discharge hazardous chemicals and other materials that can have a negative impact on our treatment plant.

#### WHAT ARE BMPS?

BMPs are activities and procedures that your business performs to prevent negative impacts at the City of Spokane RPWRF. The BMPs include:

## Water Use

- Efforts to reduce water should be pursued. This may include: recycling of gray water, purchasing water efficient equipment, such as tunnel washers and other automated systems.
- Reverse/Osmosis process for de-mineralizing water is preferred to water softening. Softened water contains dissolved salts and is more corrosive to copper pipes.
- Disinfection should be accomplished without the use of formaldehyde. Other disinfectants that may be used are sodium hypochlorite (bleach), bromine and peracetic acid.
- Routinely inspect all equipment for leaks and perform regular equipment maintenance.

## Hot Water Systems and Heat Reclamation

- Chlorination or high temperature water is preferred to electrolysis systems which introduce copper and silver ions into the water.
- Corrosion from lead solder repair and copper pipes can result in both lead and copper being discharged. Corrosion controls such as reduced or intermittent chlorination, lowered or intermittent high temperatures, protective magnesium anodes, alternate piping materials, slower recirculation rates, pH adjustment, or chemical controls such as the addition of sodium bicarbonate are recommended to reduce copper and lead contamination of wastewater.
- Heat from the hot water system boilers, and wastewater from the washers, should be reclaimed.

## Waste Disposal

- At a minimum, the wastewater should be filtered, and passed through an oil/water separator.
- Request permission from City of Spokane Industrial Pretreatment Program for disposal to sewer of wastes not previously disclosed.
- Become familiar with regulations for wastewater: Federal regulations 40 Code of Regulations Parts 403 and 460, State of Washington regulations Washington Administrative Code 173-216 and 173-240, and Local Effluent Limits published in Spokane Municipal Code 13.03A.0201 and 13.03A.0204.

\*\*\*\*\*\*\*\*More information on the reverse\*\*\*\*\*\*\*\*

## Soiled Laundry

- No hazardous materials, such as liquids or oils or solvents dripping from soiled articles, are allowed.
- No items, such as thermometers or sharps, are allowed in soiled laundry.
- No rags used to clean up spills from hazardous substances are allowed in soiled laundry.

## Chemical Use and Storage

- Determine minimum chemical use for effective cleaning procedures. Use automated dispensers from bulk containers for cleaning chemicals to insure consistent usage per load.
- Material Safety Data Sheets (MSDS) should be available for each material that is used onsite. It is important to remember that many MSDS do not list all ingredients. Some components, such as copper or zinc, are problems for the Spokane River via disposal to the sanitary sewer, but are not included because they are not safety issues or there are no reporting requirements.
- Chemicals used in the laundry are concentrated and should be stored properly. This means that incompatible chemicals should be separated from each other. All containers are labeled. Empty containers should be managed in a responsible manner, preferably, recycled.
- It is preferable to have a purchasing and tracking system that evaluates the cost of disposal method before any new chemical is brought on-site.

## Spill Containment

- Secondary containment should be provided for all stored materials so that material is protected from entering a sanitary or storm drain.
- Reduce the likelihood of liquid spills by using a gravity spigot or pump to dispense bulk liquid.
- Floor drains should be eliminated in all areas where hazardous materials are handled.
- Spill cleanup kits and training for all personnel working in the area should be provided. Spilled chemicals should not be washed down the drain.
- Drains for safety showers must be provided with a temporary plug which remains closed except when the shower is in use, or the drain must be protected from spills by either a covered sump or a berm system.

If you have any questions about your wastewater, please contact us for guidance: City of Spokane Riverside Park Water Reclamation Facility (509) 625-4600

#### IMPORTANT CONTACT INFORMATION

Hazardous waste handling contact: Department of Ecology (509) 329-3400

Hazardous spills contact: Spokane Fire Department 9-1-1

Large volumes of spills that are not hazardous to human health and the environment contact: Sewer Maintenance (509) 625-7900 RPWRF (509) 625-4600 (days) or (509) 625-4610 (after hours)

Proper disposal of materials and recycling contact:

City of Spokane Solid Waste Department (509) 625-7878